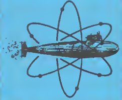
YOUR PROFESSIONAL FUTURE WITH THE
PORTSMOUTH NAVAL SHIPYARD



DEPARTMENT OF THE NAVY
BUREAU OF SHIPS

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MISSION

The Portsmouth Naval Shipyard's mission is to design and develop the most advanced types of submarines possible within an ever changing framework of technological breakthroughs and to insure United States Naval submarine superiority and our National Defense.

To carry out its assigned mission, the Portsmouth Naval Shipyard's work lies on the frontier of a demanding and fast growing "Inner Space" technology, dealing with problems whose solutions are vital to the nation's security. Its tasks are pursued in a climate of free and objective inquiry, modern facilities and rewarding professional associations.

THESE ARE SOME OF THE TECHNICAL ACCOMPLISHMENTS

Today at the Portsmouth Naval Shipyard, creative thinking and more than eight decades of experience are being employed to ensure the success of our present and future submarine activities.

Portsmouth has always taken the lead in designing submarine hulls for deeper diving. Recent accomplishments include the design and construction of the new experimental submarine DOLPHIN. This submarine was developed to explore operating depths far greater than previous submarines and to accomplish oceanographic and acoustic research.

The DOLPHIN, which is the forerunner of the combatant submarines of the future, represents the third step in achieving greater submarine operating depths made since World War II. In each of these three steps, the design was accomplished and the first submarine of the class was built at Portsmouth.

Among the more recent design projects at Portsmouth is the development of a new submarine radio communications antenna. This new antenna is expected to solve a serious communications problem of long standing. Another development is the portable bridge navigation and communication system developed at Portsmouth, which provides a reliable and simplified means for navigating a submarine on the surface.

Along with greater depth comes the problem of submarine safety; and in this field, Portsmouth has been assigned the lead role in cooperation with the Bureau of Ships and the Submarine Safety Center in New London This program involves a review of all critical shipboard systems and action to provide improved hardware and assurance of adequacy for deep submergence operation.

In addition to the activities above, major technological advances have been achieved in the fields of naval architecture and structural design, marine mechanical engineering and underwater research.

AT PORTSMOUTH NAVAL SHIPYARD

1. *Artists' conception of USS Dolphin, a deep diving experimental submarine*
2. *Launching of the USS Abraham Lincoln, an addition to our expanding underwater fleet*
3. *Submarine hull test tank, one of the many tools developed and used at Portsmouth*
4. *USS Tinosa, a fast attack type submarine ready for active duty*
5. *USS John Adams, another fleet ballistic submarine, built at Portsmouth, heads for her duty station*

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FACILITIES

Portsmouth, New Hampshire is the home of our Headquarters and Production Facilities.

The Portsmouth Naval Shipyard employs more than 1000 Engineers and Technicians. Total plant facilities exceed 200 acres.

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1. One of three drydocks used by the Portsmouth Naval Shipyard

2. The submarine sound basin used to identify, measure and control submarine noise output

3. Aerial view of the Portsmouth Naval Shipyard complex

THE PORTSMOUTH NAVAL SHIPYARD ENGINEERING FAMILY

DESIGN DIVISION

The major goal of the Design Division is to advance the art of Submarine Design. In pursuing this goal, practically every type of professional engineering is represented by some task in the Design Division. The types of engineering work include:

Naval Architecture and Structural Design

This function is concerned with the structure, weight, stability, and controllability of the ship. The duties involve developing the ship's hull form, designing the control surfaces and the ship's ballasting system. The proper accomplishment of this work assures that the submarine will be sea-worthy, safe to operate, and suitable for its intended missions.

Mechanical and Marine Design

This group is responsible for the design and development of Submarine Mechanical and Marine Systems. Typical Mechanical Systems are the Ship Controls Systems, Masts Systems, and the Ordnance Systems. Marine Systems include the Environmental Control System, Fuel and Lubricating Oil Systems, Hydraulic System, Pneumatic System, Oxygen System, Sea-Water System, Steam System, and Fresh Water System.

Electrical and Electronic Design

The Electrical/Electronic Area is responsible for System Engineering and hardware development of Warfare Systems, Power and Distribution Systems, and Ship Control and Communications Systems.

Design Support Activities

These groups provide engineering support to the above major Design Areas and include:

The Computer Support Branch
The Technical Support Branch
The Design Liaison Branch
The Ship Silencing Branch
The Test and System Engineering Support Branch

NUCLEAR POWER DIVISION

The power for all modern submarines emanates from the nuclear power plant. The Nuclear Power Division is responsible for the construction, overhaul, maintenance, modification, and refueling of submarine nuclear reactor plants, including planning and engineering.

Engineers and scientists of various types, such as Structural, Chemical, Electrical, Electronic, Mechanical, Nuclear, as well as Chemists and Physicists, are employed in the Nuclear Power Division. The responsibilities of the Nuclear Power Division includa reactor safety, radiological control, production engineering, testing, inspection, and preparation of technical specifications.

The Nuclear Powar Division consists of the following major groups:

Reactor Engineering Branch
Fluid Systems & Mechanical Branch
Control Engineering Branch
Test Engineering Branch
Raactor Metal Fabrications Welding Branch
Nuclear Quality Engineering Branch
Radiological Engineering Branch

COMBAT SYSTEMS DIVISION

The Combat Systems Division provides field engineering services to the productive forces of the Shipyard to facilitate the installation and testing of the most modern and sophisticated Inertial Navigation, Fire Control, Sonar, Radar, and Weapon-handling Systems found in our Navy.

These services include co-ordination of productive work, troubleshooting systems' problems and conducting operational tests both dockside and at sea. The duties of a Combat Systems Engineer bring him in close contact with highly developmental equipment and provide him with an excellent opportunity to make major contributions to our knowledge concerning sound propagation in water, inertial components, electrical noise quieting, electromagnetic interference, equipment handling and storage, and submarine development in general.

The Combat Systems Division consists of the following major groups:

Electronics Branch
Mechanical Branch
Weapons Control Branch
Polaris Task Group

PRODUCTION DEPARTMENT

The Production Department is responsible for the construction, overhaul, and repair of submarines. A large number of professional engineers and sciantists are necessary to support this function such as Mechanical, Electrical, Civil, Industrial and Welding Engineers as well as metallurgists and chemists. They are utilized in the following areas of work:

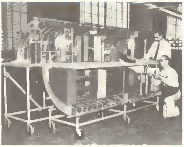
Quality Control Engineering
Materials and Equipment Testing
Non-Destructive Testing
Production Engineering
Welding Engineering

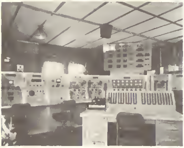
THE COMMUNITY

Portsmouth Naval Shipyard's principal facilities are located in Portsmouth, the heart of New Hampshire's beautiful vacation land. Here you and your family will enjoy the best in suburban living with true urban convenience. Portsmouth is a clean, friendly and progressive community. It possesses modern hospitals and a school system which is among the best in the nation. Whatever your recreational interests are, you will find them close to your door. Numerous golf courses are near-by, fishing and hunting are excellent, all water sports are available at neighboring ocean and lakes and winter sports areas provide the best in skiing, skating and tobogganing facilities. Housing is plentiful. Cultural facilities, summer theaters, community concerts and outstanding programs at nearby colleges and universities are available on a year 'round basis.

A PROFESSIONAL WORKING ENVIRONMENT

Because of the unlimited technological scope at Portsmouth Naval Shipyard, there are continuous openings for individuals with experience and training in many engineering and scientific areas. Typically, our organization needs the services of highly competent personnel such as Mechanical, Civil, Naval Architectural, Electrical, Electronic, Industrial and Nuclear Engineers as well as Chemists, Physicists and Technical Writers. Traditionally, the Portsmouth Engineer has enjoyed broad latitude in discovering, defining and solving problems; informality has been the hallmark in our organization. We have always provided our professional staff with modern equipment and adequate support personnel required to assure quality work. We encourage our Engineers to become active in professional societies and to publish and deliver technical papers. You will be furnished with all possible assistance toward gaining your professional and personal goals.





SALARY AND BENEFITS

Portsmouth Naval Shipyard bases remuneration on the professional competence of the individual. Additionally, we have a comprehensive and liberal benefits program which includes:
. . . . Complete health and life insurance coverage . . . . Retirement program . . . . Training programs for new graduates as well as special courses in new techniques . . . . Liberal holiday and vacation schedules . . . . An employee suggestion program which includes merit and financial awards.

YOUR FUTURE

Naturally your future depends primarily upon you and your ability. However, Portsmouth Naval Shipyard offers you a stimulating environment where past and present developments have resulted from the contributions of its engineers. We have always encouraged our engineers to move beyond "off the shelf" concepts and to continue toward areas that require original creative thinking. If you are a person who seeks more than just a job and who hopes to reach his full professional potential, we sincerely believe you will find that opportunity waiting for you today at Portsmouth Naval Shipyard.

For further information write

Industrial Relations Office
PORTSMOUTH NAVAL SHIPYARD
Portsmouth, New Hampshire

All candidates receive equal consideration without regard to sex, race, creed, color, or national origin.